Yiliang Wu

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/11774859/publications.pdf

Version: 2024-02-01

75 papers	5,843 citations	87888 38 h-index	95266 68 g-index
80 all docs	80 docs citations	80 times ranked	5891 citing authors

#	Article	IF	Citations
1	Benzothienobenzothiophene/polyimide blend-based organic phototransistors with double-layer gate dielectric. Organic Electronics, 2018, 59, 349-357.	2.6	7
2	Effects of gate dielectric surface modification on phototransistors with polymer-blended benzothieno[2,3- b]benzothiophene semiconductor thin films. Organic Electronics, 2017, 44, 253-262.	2.6	6
3	Binary Blends of Polyimide and Benzothienobenzothiophene for Highâ€Performance Solutionâ€Processed Organic Phototransistors. Advanced Electronic Materials, 2017, 3, 1700284.	5.1	14
4	Effect of Polymer Binders on UV-Responsive Organic Thin-Film Phototransistors with Benzothienobenzothiophene Semiconductor. ACS Applied Materials & Interfaces, 2016, 8, 3744-3754.	8.0	18
5	Highly UVâ€Sensitive and Responsive Benzothiophene/Dielectric Polymer Blendâ€Based Organic Thinâ€Film Phototransistor. Advanced Electronic Materials, 2015, 1, 1500119.	5.1	36
6	Sensitivity of the threshold voltage of organic thin-film transistors to light and water. Journal of Applied Physics, 2015, 117, .	2.5	5
7	A More Than Six Orders of Magnitude UVâ€Responsive Organic Fieldâ€Effect Transistor Utilizing a Benzothiophene Semiconductor and Disperse Red 1 for Enhanced Charge Separation. Advanced Materials, 2015, 27, 228-233.	21.0	54
8	Ion Transport and Switching Speed in Redox-Gated 3-Terminal Organic Memory Devices. Journal of the Electrochemical Society, 2014, 161, H831-H838.	2.9	21
9	Comparison of conductor and dielectric inks in printed organic complementary transistors. Proceedings of SPIE, 2014, , .	0.8	0
10	Precise parameter extraction technique for organic thin-film transistors operating in the linear regime. Journal of Applied Physics, 2014, 115, .	2.5	27
11	Graphene Nanoplatelets Prepared by Electric Heating Acid-Treated Graphite in a Vacuum Chamber and Their Use as Additives in Organic Semiconductors. ACS Applied Materials & Interfaces, 2014, 6, 20269-20275.	8.0	12
12	Using unsorted single-wall carbon nanotubes to enhance mobility of diketopyrrolopyrrole-quarterthiophene copolymer in thin-film transistors. Organic Electronics, 2014, 15, 2639-2646.	2.6	5
13	Unsorted single walled carbon nanotubes enabled the fabrication of high performance organic thin film transistors with low cost metal electrodes. Chemical Communications, 2013, 49, 8791.	4.1	5
14	Direct spectroscopic monitoring of conductance switching in polythiophene memory devices. Electrochimica Acta, 2013, 110, 437-445.	5.2	12
15	Composite Semiconductor Material of Carbon Nanotubes and Poly[5,5â€²-bis(3-dodecyl-2-thienyl)-2,2â€²-bithiophene] for High-Performance Organic Thin-Film Transistors. Journal of Electronic Materials, 2013, 42, 3481-3488.	2.2	8
16	Redox-Gated Three-Terminal Organic Memory Devices: Effect of Composition and Environment on Performance. ACS Applied Materials & Interfaces, 2013, 5, 11052-11058.	8.0	41
17	Development of Silver Nanoparticle Ink for Printed Electronics. Journal of Microelectronics and Electronic Packaging, 2013, 10, 49-53.	0.7	3
18	Spatially Resolved Raman Spectroelectrochemistry of Solid-State Polythiophene/Viologen Memory Devices. Journal of the American Chemical Society, 2012, 134, 14869-14876.	13.7	118

#	Article	IF	Citations
19	Redox driven conductance changes for resistive memory. Applied Physics A: Materials Science and Processing, 2011, 102, 841-850.	2.3	38
20	Direct Method of Tracing the Wetting States on Nanocomposite Surfaces. Langmuir, 2010, 26, 7686-7689.	3.5	19
21	Facile Inkjet-Printing Self-Aligned Electrodes for Organic Thin-Film Transistor Arrays with Small and Uniform Channel Length. ACS Applied Materials & Interfaces, 2010, 2, 2189-2192.	8.0	35
22	High-Performance Polythiophene Thin-Film Transistors Processed with Environmentally Benign Solvent. Macromolecules, 2010, 43, 6368-6373.	4.8	29
23	Inkjet printing narrow electrodes with <50â€‚Î¼m line width and channel length for organic thin-film transistors. Applied Physics Letters, 2009, 94, .	3.3	58
24	High performance nanocomposite thin film transistors with bilayer carbon nanotube-polythiophene active channel by ink-jet printing. Journal of Applied Physics, 2009, 106, .	2.5	40
25	Enhancement of Carrier Mobilities of Organic Semiconductors on Solâ€“Gel Dielectrics: Investigations of Molecular Organization and Interfacial Chemistry Effects. Advanced Functional Materials, 2009, 19, 378-385.	14.9	15
26	Novel High-Performance Liquid-Crystalline Organic Semiconductors for Thin-Film Transistors. Chemistry of Materials, 2009, 21, 2727-2732.	6.7	46
27	Direct Observation of Alkyl Chain Interdigitation in Conjugated Polyquarterthiophene Selfâ€Organized on Graphite Surfaces. Macromolecular Rapid Communications, 2008, 29, 1197-1202.	3.9	53
28	Thiophene Polymer Semiconductors for Organic Thinâ€Film Transistors. Chemistry - A European Journal, 2008, 14, 4766-4778.	3.3	274
29	A comparative study of plasma-enhanced chemical vapor gate dielectrics for solution-processed polymer thin-film transistor circuit integration. Journal of Applied Physics, 2008, 104, .	2.5	12
30	Organic thin-film transistor integration using silicon nitride gate dielectric. Applied Physics Letters, 2007, 90, 133514.	3.3	31
31	Self-aligned inkjet printing of highly conducting gold electrodes with submicron resolution. Journal of Applied Physics, 2007, 101, 064513.	2.5	73
32	ZnO field-effect transistors prepared by aqueous solution-growth ZnO crystal thin film. Journal of Applied Physics, 2007, 102, 076101.	2.5	36
33	Low-Temperature, Solution-Processed, High-Mobility Polymer Semiconductors for Thin-Film Transistors. Journal of the American Chemical Society, 2007, 129, 4112-4113.	13.7	347
34	Stable Solution-Processed High-Mobility Substituted Pentacene Semiconductors. Chemistry of Materials, 2007, 19, 418-423.	6.7	114
35	Poly(3,3â€´-didodecylquarterthiophene) field effect transistors with single-walled carbon nanotube based source and drain electrodes. Applied Physics Letters, 2007, 91, 223512.	3.3	26
36	A Simple and Efficient Approach to a Printable Silver Conductor for Printed Electronics. Journal of the American Chemical Society, 2007, 129, 1862-1863.	13.7	144

#	Article	IF	Citations
37	Printed Silver Ohmic Contacts for High-Mobility Organic Thin-Film Transistors. Journal of the American Chemical Society, 2006, 128, 4202-4203.	13.7	119
38	Polyindolo[3,2-b]carbazoles:Â A New Class of p-Channel Semiconductor Polymers for Organic Thin-Film Transistors. Macromolecules, 2006, 39, 6521-6527.	4.8	141
39	Effects of humidity on unencapsulated poly(thiophene) thin-film transistors. Applied Physics Letters, 2006, 88, 113514.	3.3	61
40	Organic thin-film transistors with poly(methyl silsesquioxane) modified dielectric interfaces. Applied Physics Letters, 2006, 89, 013505.	3.3	31
41	Studies of Gold Nanoparticles as Precursors to Printed Conductive Features for Thin-Film Transistors. Chemistry of Materials, 2006, 18, 4627-4632.	6.7	84
42	Synthesis and Thin-Film Transistor Performance of Poly(4,8-didodecylbenzo[1,2-b:4,5-bâ€˜]dithiophene). Chemistry of Materials, 2006, 18, 3237-3241.	6.7	130
43	Enabling Gate Dielectric Design for All Solution-Processed, High-Performance, Flexible Organic Thin-Film Transistors. Journal of the American Chemical Society, 2006, 128, 4554-4555.	13.7	117
44	Study of Organic Thin-film Transistor on Silicon Nitride Gate Dielectrics for Integration in Display Circuits and Arrays. , 2006, , .		0
45	Enabling Materials for Printed Electronics. , 2006, , .		4
46	Printed Organic Electronics. , 2005, , 219-243.		1
47	Effects of semiconductor-dielectric interfaces on polymeric thin-film transistors. , 2005, , .		3
48	Substituted Indolo[3,2-b]Carbazoles: A New Class of Stable, High Mobility Organic Semiconductors for Thin Film Transistors. Materials Research Society Symposia Proceedings, 2005, 871, 1.	0.1	0
49	Organic Thin Film Transistors with Contacts Printed from Metal Nanoparticles. Materials Research Society Symposia Proceedings, 2005, 871, 1.	0.1	0
50	Design of High-Performance Regioregular Polythiophenes for Organic Thin-Film Transistors. Proceedings of the IEEE, 2005, 93, 1412-1419.	21.3	39
51	Printed polymer and aâ€Si TFT backplanes for flexible displays. Journal of Information Display, 2005, 6, 12-17.	4.0	1
52	Poly(3,3â€˜â€‰â€˜-dialkylterthiophene)s:â€‰ Room-Temperature, Solution-Processed, High-Mobility Semiconductors for Organic Thin-Film Transistors. Chemistry of Materials, 2005, 17, 221-223.	6.7	95
53	Facile Synthesis of Silver Nanoparticles Useful for Fabrication of High-Conductivity Elements for Printed Electronics. Journal of the American Chemical Society, 2005, 127, 3266-3267.	13.7	456
54	Controlled orientation of liquid-crystalline polythiophene semiconductors for high-performance organic thin-film transistors. Applied Physics Letters, 2005, 86, 142102.	3.3	130

#	Article	IF	Citations
55	Indolo[3,2-b]carbazole-Based Thin-Film Transistors with High Mobility and Stability. Journal of the American Chemical Society, 2005, 127, 614-618.	13.7	339
56	Lamination Method for the Study of Interfaces in Polymeric Thin Film Transistors. Journal of the American Chemical Society, 2004, 126, 13928-13929.	13.7	96
57	Short channel effects in regioregular poly(thiophene) thin film transistors. Journal of Applied Physics, 2004, 96, 2063-2070.	2.5	81
58	Photoinduced Chirality in Thin Films of Achiral Polymer Liquid Crystals Containing Azobenzene Chromophores. Macromolecules, 2004, 37, 6801-6805.	4.8	81
59	Microscopic Studies on Liquid Crystal Poly(3,3â€˜Ââ€˜â€˜-dialkylquaterthiophene) Semiconductor. Macromolecules, 2004, 37, 8307-8312.	4.8	86
60	Photoinduced Birefringence and Surface Relief Gratings in Polyurethane Elastomers with Azobenzene Chromophore in the Hard Segment. Macromolecules, 2004, 37, 6090-6095.	4.8	64
61	Polythiophene-based field-effect transistors with enhanced air stability. Synthetic Metals, 2004, 142, 49-52.	3.9	73
62	High-Performance Semiconducting Polythiophenes for Organic Thin-Film Transistors. Journal of the American Chemical Society, 2004, 126, 3378-3379.	13.7	1,018
63	Investigation of circular Bragg reflection in an azo polymer with photoinduced chirality. Journal of Applied Physics, 2003, 94, 2162-2166.	2.5	37
64	Photoinduced Birefringence and Surface Relief Gratings in Novel Polyurethanes with Azobenzene Groups in the Main Chain. Macromolecules, 2001, 34, 7822-7828.	4.8	84
65	Photoinduced alignment of polymer liquid crystals containing azobenzene moieties in the side group VII. On He-Ne laser beam irradiation. Liquid Crystals, 2000, 27, 749-753.	2.2	14
66	Optical Switching and Image Storage by Means of Photochromic Liquid Crystals. Molecular Crystals and Liquid Crystals, 2000, 347, 1-13.	0.3	9
67	Photoinduced alignment of polymer liquid crystals containing azobenzene moieties in the side chain. 4. Dynamic study of the alignment process. Polymer, 1999, 40, 4787-4793.	3.8	70
68	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 5. Effect of the Azo Contents on Alignment Behavior and Enhanced Response. Macromolecules, 1999, 32, 3951-3956.	4.8	103
69	Three-Dimensional Manipulation of an Azo Polymer Liquid Crystal with Unpolarized Light. Advanced Materials, 1999, 11, 300-302.	21.0	101
70	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 6. Biaxiality and Three-Dimensional Reorientation. Macromolecules, 1999, 32, 8829-8835.	4.8	65
71	Miscibility of phenoxy polymer/poly(methyl acrylate-co-methyl methacrylate) blends. European Polymer Journal, 1998, 34, 1261-1263.	5.4	7
72	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 1. Effect of Light Intensity on Alignment Behavior. Macromolecules, 1998, 31, 349-354.	4.8	139

#	Article	IF	Citations
73	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 2. Effect of Spacer Length of the Azobenzene Unit on Alignment Behavior. Macromolecules, 1998, 31, 1104-1108.	4.8	107
74	Photoinduced Alignment of Polymer Liquid Crystals Containing Azobenzene Moieties in the Side Chain. 3. Effect of Structure of Photochromic Moieties on Alignment Behavior. Macromolecules, 1998, 31, 4457-4463.	4.8	66
75	Miscibility of phenoxy polymer/polyacrylate blends. Macromolecular Chemistry and Physics, 1996, 197, 3191-3197.	2.2	7